

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : CRYSTAGE CO LTD

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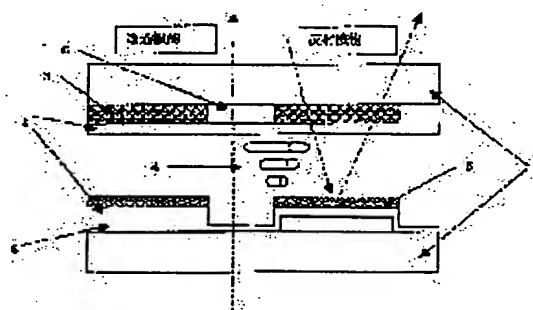
(72)Inventor : SEIMOTO NORIKAZU

(54) LIQUID CRYSTAL DISPLAY DEVICE AND INSTRUMENT INCORPORATING THE SAME

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a liquid crystal display device provided with both reflection and transmission functions each having satisfactory optical performance for practical use.

SOLUTION: The liquid crystal display device having both reflection and transmission property has a structure wherein a light scattering function layer in a three dimensional range of a transmission function part is removed.



LEGAL STATUS

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**Japanese Laid-Open Patent Publication No.
172941/2003 (Tokukai 2003-172941)**

A. Relevance of the Above-identified Document

The following is a partial English translation of exemplary portions of non-English language information that may be relevant to the issue of patentability of the claims of the present application.

[CLAIMS]

1. A liquid crystal display having a structure in which a light scattering function layer is provided between a substrate having reflection and transmission functions and an opposing substrate,

wherein the light scattering function layer is not provided in a three dimensional range where the transmission function is present.

(19) 日本国特許庁 (J P) (12) 公開特許公報 (A)

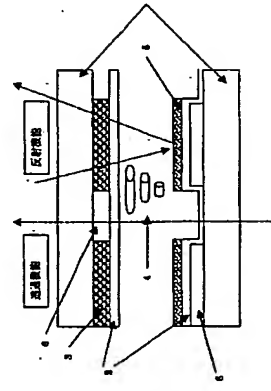
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(21) 出願番号	特開2001-402510 (P2001-402510)	(71) 出願人	500214028 株式会社クリスタージュ 兵庫県神戸市中央区港島9丁目1番地 K -CAT 2階
(22) 出願日	平成13年12月6日 (2001.12.6)	(72) 発明者	鈴木 隆和 兵庫県神戸市中央区港島中町3丁目1番地 ポートアイランド団地 55棟705号 Fターム (参考) 2H042 BA01 BA11 BA13 BA20 2H091 FA16Y FA31Y LA17 LA18 2H092 CA17 HA03 HA05 NA01 PA12

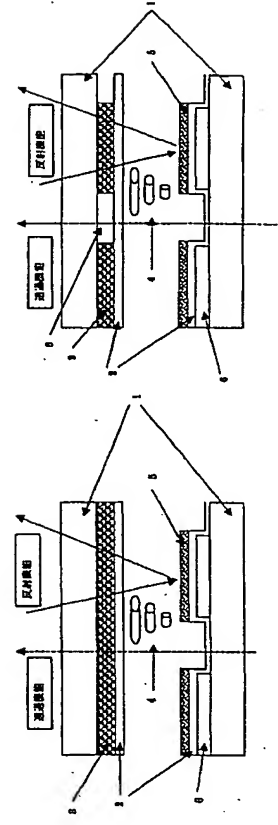
(54) 【発明の名称】 液晶表示装置とその搭載機器

(57) 【要約】
【目的】 反射機能と透過機能を同時に兼ね備えた液晶表示装置で両機能とも使用に十分耐えうる光学性能をもたらし、
【構成】 反射型と透過型を同時に兼ね備える液晶表示装置で透過機能部分の3次元範囲の光散乱機能層を除去した構造からなる液晶表示装置。



【図1】

【図2】



【図1】

【図2】

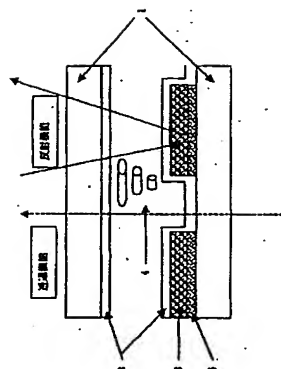
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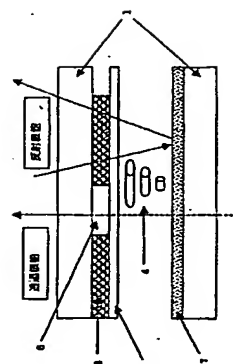
【図 3】

構造	図 1	図 2
反射膜	反射率 (%) 10%	10%
透過膜	透過率 (%) 16 : 1	16 : 1
透過膜	透過率 (%) 1.7%	2.0%
透過膜	透過率 (%) 36 : 1	60 : 1

【図 4】



【図 5】



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